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FRONT COVER

European Farm Women

These Swiss women symbolize the traditional, back-breaking role of Europe's farm women. (Photo courtesy of A. Steiner.)

BACK COVER

Women Engaged in Agriculture In Specified Countries in Europe

Women are an important part of the farm labor force in most European countries.

NEWS NOTES

Institutes for Foreign Trainees

United States programs for training foreign nationals who come to this country for agricutural study will be highlighted in 1952 by the development of a number of institutes or short courses designed especially for these visitors.

Under this plan, visitors who have similar interests and study objectives can be trained as a group at one or two universities rather than singly or in small teams at a number of schools.

OFAR coordinates the agricultural training of visitors coming to this country under sponsorship of the Economic Cooperation Administration, the Department of State, the Army, and other Federal and international agencies. ECA, working with OFAR and the land-grant colleges, began last year to press for institute type training in 1951. Although several successful institutes were held this year, there were two major difficulties: (1) It was not easy to group people into institutes when their written study objectives were different; (2) most trainees coming to this country in 1951 had made leave and security arrangements too far in advance for their trips to be rescheduled.

But in planning for 1952, ECA started early—at a meeting of ECA officers in Rome last June. As a result, a substantial percentage of the ECA training projects in 1952 will be based on the institute approach. Of course, there will continue to be individual projects that cannot be fitted into scheduled institutes.

ECA officers in Paris have suggested institutes in 13 broad subject matter fields, and these institutes are now being planned. The fields suggested: agricultural extension, home economics extension, agricultural information, soil and water conservation, pasture improvement and fodder crop production, pure seed increase, fertilizers and liming materials, fruit and vegetable production, livestock diseases, milk production, poultry management, agricultural marketing, and farm organizations.

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FOREIGN AGRICULTURE ALICE FRAY NELSON, EDITOR

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The Changing Role Of Europe's Farm Women

Observations on the status of Europe's farm women, by a home economist of the United States.

by MENA HOGAN

Europe is beginning to realize that there can never be complete agricultural progress until farm women are accepted as partners in the family enterprise.

Such a partnership is almost revolutionary in present-day thinking in Europe. Whatever little progress that has been made in the status of rural women has been evolutionary in nature. Maybe this has been good. European farm women could not have emerged all at once from under century-old burdens. You have only to look at the life of some European farm women to realize just how far they must still go to assume their place in the home as a partner of their husbands, as a guide to their children, with full rights, privileges, and responsibilities in the family membership.

"The rural homemaker in Bavaria has the status of an unskilled farm laborer. This position she shares with the ox, for the two are usually paired together." This statement was made by Jessie Harris, Dean of Home Economics at the University of Tennessee, following her 6-month study of Bavarian farm life and Bavarian institutions last year. "This Bavarian farm woman," says Miss Harris, "does the major part of the manual farm work, going to the farm early and staying late. She has little time left for her home and her family and no time at all for community participation. What work she does do in the home is done the hard way. She has no labor-saving equipment in her home or on the farm. Her house is old and there is no modern plumbing or heating. The house is so arranged that it requires a maximum of labor and offers a minimum of comfort for the family living. The farm animals usually live under the same roof, receiving more of the farmer's time than does the family. The manure pile is all too often at the front door and the odor pervades the unscreened house."

Miss Harris might, in my experience, have been describing many another farmhouse and homemaker in Austria, Italy, Turkey, Ireland, France, or other countries of Europe and the Middle East.

Driving along a highway in Austria, I noticed that of the first 100 people who were laboring in the fields next to the road 69 were women and 31 were men. An Austrian agriculturist thought this proportion of about 3 to 1 was perhaps a bit high—for the men.

"The traditional Irishman's thinking that women should remain in the home, and take little part in activities outside the home, is not the least of our difficulties in Ireland," Mrs. Esther Bishop, vice president of the Irish Countrywomen's Association told me, "nor can we deny that there are some of us who derive something of a martyr's pleasure out of the work we have to do."

As I visited many an Irish kitchen, I was to hope that a martyr's pleasure was not overrated! I could hardly see any satisfaction in carrying water from a great distance; in working in damp, dark, unattractive kitchens; in cooking over a low tripod in a fireplace; and in pumping bellows that fanned a thin flame to provide heat for a single pot. Certainly, for the most part, farm women of Europe accept without question the age-old role forced upon them by tradition and circumstances. Such a placid acceptance probably presents the greatest barrier to any efforts to improve the status of the distaff side of the family. Notwithstanding this, however, and many other problems there are indications of a change.

Breaking From Tradition

Hans Pilger, Director of Extension in Styria, Austria, told me that I was seeing a new Europe. I think he meant the way in which European farmers are adopting new machinery and new methods and the way in which all Europe, to some extent, is breaking away from tradition and facing present-day facts of life. I suspect he also meant the way in which some women and girls are groping for means to prevent drudgery in their homes and in their fields. Their problem, of course, like ours in the United States, is to get all to do what some have done. I found some European farm homes as completely modern as any of our own in the United States and much more self-sufficient than most. Such homes, of course, are in quite a small minority. "Straws in the wind," you might call them, indications that there is a new interest in improving life in the European farm home, but you can see their direction.

Listen to the Italian farmer and you will often find that he has developed a new feeling for the problems of his wife. You can sense that if there were more productive acres or more labor to work them he would not be forced to have his wife work as hard as he himself does in the fields.

Dr. Picini of the Italian Ministry of Agriculture told me, after we had talked with several families in the fields in Benevento Province, that such families find some compensation in the hard work they have to do—in working together, for example, and sharing the hardships that come to them. The husband does the hardest work and the heaviest lifting, he pointed out. And, indeed, this was so.

There was, too, in Italy an increased consciousness on the part of the Government that one of the country's greatest assets, its women, are not being given a chance to prove their real worth.

In a directive to all departmental agrarian inspection services throughout Italy, the Minister of Agriculture on May 15 of this year outlined plans for setting up a type of home economics extension program in Italy. In this he stated, "The aim, besides being technical, is a human and social one and the results already obtained from such work have clearly confirmed the extreme necessity of such an activity which will result in an improvement of the rural family by bringing it closer to the land and indirectly in the establishment of a sound agriculture economy."

Mrs. Adriana Corvatti has been placed in charge of the development of home economics extension work in Italy by Dr. Raffaele Chelini, Director of Extension. Much of the interest in this work has grown out of the short courses developed by the inspectorate staffs in the Italian Provinces and by Dr. Chelini and Mrs. Corvatti. Seventy-five such 1- or 2-week courses have been attended by approximately 2,000 young farm women. According to the Minister of Agriculture, these courses have shown that Italian countrywomen "have a strong wish to

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perfect their knowledge; to improve their professional accomplishments; to become more useful, through the conscious exaltation of domestic virtues, to the life of the families and to the agricultural requirements."

There is also an increased consciousness throughout Europe that unless the life of the women on the farm is made more attractive, young farmers will have difficulty finding wives. "Our daughters won't put up with what we have had," an Irish mother of 10 children told me in County Wexford, "so they are leaving the farm for the city, nor can I blame them."

This cityward trend was pointed out to me in France and in England. Indeed it was the same in most of the 11 countries I visited. Always it was directly attributed to the drudgery and monotony of a life bound by walls of an ancient home and its surrounding acres.

The French Ministry of Agriculture in an effort to offset this great loss to agriculture has put new vigor behind its 1-year home economics and agricultural schools. There are 80 of these schools, attended each year by approximately 3,000 young women. "Only a drop in the bucket," Yves Hamon of the French Ministry of Agriculture said, "but it is a beginning and we have made progress." I visited 13 such schools in France that are Government-sponsored and a number of others that are maintained by Catholic nuns. Most of them were old French chateaux and castles, which had been leased,

Greek farm woman drawing water from the village well. Running water is a convenience not common in Europe's farm houses.

Side-by-side, men and women harvest and crush grapes in this Italian vineyard.

bought outright, or acquired as a gift, and transformed into a sort of boarding school for from 30 to 50 girls. Under expert supervision (there were usually three well-trained home economists in charge of these schools) the girls were taught to manage a farm home, run a home dairy, manage a garden and orchard, feed a family well, and otherwise see to the needs of a farm household. I saw somewhat similar school systems in Germany, Austria, England, Scotland, and Holland.

The serious problem in most of these areas, however, is that present facilities for training teachers for such schools are either nonexistent or at best somewhat poorly equipped and staffed. "Teachers and leaders lack knowledge of modern research and methods and the existing educational system does not provide for the creation of a breadth of interests. Until those who teach farm girls and women receive more adequate training on the higher level and until the German leaders are convinced that a new education for living must be brought into every farm home, the medieval conditions of work and the social status of the farm women will continue." Thus, Dr. Catherine Holtzclaw, of HICOG in Germany, summed up the German situation in her report of 1949. It is a summary, I believe, that might well be applied to this problem in most of Europe. Not only is this area of Europe faced with difficulties in reaching this important segment of the population (women outnumber men in Europe) but there is so little information in Europe in home economics education that has been based on research.

Holland is establishing a home economics department at Wageningen University that will offer master's and doctor's degrees in home economics, but, outside England, Belgium, and the Scandinavian countries, there are practically no schools where home economics education of graduate level is carried on.

Men and the New Status of Women

Perhaps the most hopeful sign in all Europe is the attitude of the male members of the population, particularly those who have become agricultural leaders, both professional and lay. Some of them have realized that no nation can so palpably neglect more than 50 percent of its adult population and progress, even agriculturally. Many agriculturists have come to the United States on technical assistance programs. Although coming to study agriculture, they have noticed the interest American farm women have taken, not only in the agriculture on their own farms, but also in problems of community, State, and Nation-wide significance. Indeed, these agriculturists found that it was the women who quite often had interested their husbands in adopting new methods. This was something that appealed to the professional agriculturists. They knew the influence of the European woman when it came to adopting new methods that they, as agriculturists, were advocating.

Very few men who have come to the United States have left without seeing a good deal of the extension program with farm women. Some saw its influence when they lived in a farm home and saw the homemaker's interest and participation in the home demonstration club and other rural organizations. Some accompanied the county home demonstration agent as she went her rounds in a county.

European Women and Communism

Most of these visiting technicians have seen values in home economics extension beyond those that might accrue to agriculture directly. It is the women in Austria who are the greatest influence against communism, I was informed at Linz, Austria, by Engineer Ignaz Hauschild, Extension Director for the Linz Province, because they turn their husbands against it. Mr. Hauschild came to the United States last year and was much impressed with home demonstration work, so much so that he is mobilizing every resource of his Province to extend some type of homemaking information to farm women. Mr. Hauschild feels that girls will make the greatest strides in extension work, for they adapt more readily to new ideas. But a chance to work with adult women as well should not be overlooked, even though they are slower to change.

In the heart of a heavily infested Communist area in the Po River Valley, I asked one of the Provincial inspectors (a sort of Italian agricultural county agent) who the Communists were. He replied that the farmer, who owns some land or is content with the land he lives on, does not want to divide or combine it, so he is not a communist. Only the man who has nothing to divide thinks it is a good idea.

As I visited farmer-owned and day-laborers' homes in this Province—Bologna—I was to think often of his answer. More than 40,000 day laborers live here, and the Government compels farmers to employ them a minimum of 150 days a year. While this Province probably has the richest land in all Italy, conditions in the homes are poor and there is little pride of person or surrounding. There are many causes for these conditions, probably largely economic. At the same time, it was my opinion that a real home demonstration agent who had a sympathy and affection for her people and who commanded their respect and liking could do a great deal to eliminate some of the unrest and some of the misery and squalor. It would not be new equipment she would recommend because she would know the families could not afford it. But she would be generous with encouragement and she would be a good listener and quietly begin to suggest whitewashed walls that would banish the gloom of a "smoke" kitchen; laundry methods that would eliminate days of scrubbing, costly to both clothes and woman-power; home improvement, by encouraging the latent Italian instinct for beauty. All these would not cost money. Yet, they might help to make people more contented.

Community Centers

Home equipment as it is known in the United States may never be common in Europe. Labor is too plentiful, although domestic labor is getting scarce in many countries; mass production of equipment is not a reality; and the cost of a simple washing machine is beyond the income of all except a very few farmers. These facts do not preclude improvements, however, as demonstrated in Germany. Here, through the use of counterpart funds, community service centers have been built. In one building, these centers have a laundry, a smokehouse, a sewing room, ironing rooms, a bakery, showers, meat cutters, and other facilities.

I visited three of these at Waldthurn, Kirchberg, and Hirchaid. At Waldthurn I found 10 women using the washing machines, and others had scheduled them every day through the next month. German housewives, I was told, used to do their laundry once in every 5 or 6 weeks. Now, they wash every 2 or 3 weeks, because it takes them only 2 or 3 hours where it did take 2 or 3 days for the washing task. In the bakery I watched an elderly woman us-

French kitchen at mealtime. This home has electric lights and a gas stove, luxuries available to few European farm women.

ing a machine for mixing bread. She was baking the supply of bread for a family of seven for 2 weeks. She told me that she was not strong enough to do so much baking without machines.

All the 11 centers completed at that time in Bavaria were in strategic positions in relationship to the Red threat. Waldthurn in the Bavarian Mountains is only about 9½ miles from the Czechoslovakian border. News of these centers is going over the border. Money has been allocated for the construction of 100 such centers throughout Germany through the use of counterpart funds. With most European farm families already living in villages, such centers would appear to offer distinct possibilities for lightening the burden of farm women in many areas.

Perhaps "lightening" is not the correct word, for experiences everywhere have proved that where household tasks were made easier by the use of machinery the time of the homemaker is released to other equally important and hitherto neglected responsibilities. In our own country, for example, the average farm homemaker who owns a washing machine washes her clothes twice as often as she did by hand. The result, of course, is better living standards.

Women's Organizations

Perhaps one of the greatest developments in any European country is that of the countrywomen's associations in Ireland, Scotland, England, and Wales. I saw both the Scottish countrywomen's association and the Irish one in action at Edinburgh, Scotland, and in Drogheda, Ireland. Here, as in our own country, not always those needing the benefits most were members, but those who do belong have become very vocal in the affairs of their country. In Scotland, the vice president of the association is a member of the board of trustees of the University by virtue of her office in the association.

In England the associations have obtained legislation to put far-reaching rural reforms into effect. Included in their activities has been sponsorship of a rural water supplies act and promotion of legislation to obtain rural domestic economy workers, formally known as RDES and corresponding roughly to our own home demonstration agents. There are 78 such workers in Great Britain.

In Germany the farm women's organization claims a membership of 70,000, 30,000 of them in Bavaria. They have agitated so intensively for home economics institutes of collegiate rank (nonexistent in Germany at present) that they are on the way to the attainment of this objective.

France has no organization for farm women, but work with women is beginning. Mr. Lasnier-LaChaise, Director of Extension for Lyon Province, began a series of meetings for farm women, after his study of home economics extension in the United States in 1950. Demonstrations centered around simple improvements that could be made by the homemaker. These were given by local home economics teachers from the home economics and agriculture schools for girls nearby. Mr. Lasnier-LaChaise started these meetings in isolated areas, reasoning that if women would attend there they certainly would at more favorable locations. They came and many put the suggestions they had been given into practice in their own homes. I attended the first large-scale "demonstration day" in all France, in Lyon. Four hundred women came and stayed through a day-long program. Starting the meeting with a cookery demonstration, Mr. Lasnier-LaChaise's program included a day in the life of a French farm homemaker. The success of the meeting was proof that the French homemaker will come out to meetings if the subject is of interest to her. Perhaps there will be a beginning of a French farm women's organization in the group of young women who are graduates of the 1-year agriculture and home economics schools. Already they are organizing locally and it should not be too long before they form a national organization.

All these evidences and many others point to changes in the European woman's thinking. Perhaps they also point to far-reaching results in improvements in rural living and in the whole agricultural economy.

Homemaking advisers of postwar Greece are teaching farm women the elements of better living. These girls are learning how to dry okra.

Agriculture and Land Tenure in India

by T. O. ENGEBRETSON

In India the move toward better relationships between the peasant and his land is gaining strength. The peasants themselves are beginning to widen their village-bound interests, to learn that poverty and neglect are not the lot of farmers everywhere, and to expect a better life. The Provincial Governments are trying to lighten the tax burden of peasants by eliminating revenue-collecting middlemen and by decreasing rents and interests rates. The National Government is strongly supporting agricultural wage and land reform legislation. The large landholders of India, as of all countries, are resisting reforms, but in many areas tradition is giving way and the question of improved land relationships is beginning to find some answers.

These answers are of primary importance to India, where three-fourths of the working population is engaged in agriculture but less than a third own any land. Too, half of the national income is derived from agricultural production and more than a third of the value of all exports represents exports of agricultural commodities. It may be worthwhile, therefore, to examine briefly some basic features of India's agriculture, with particular reference to the land tenure system and the economic relationships under which the average peasant cultivates the soil.

Size of Holdings

One of the most important factors affecting the character of and returns from farming is the size of holdings or of cultivation. India is primarily a country of small holdings, many of them too small to be economic. There are, however, a few large-sized holdings but most of them are tea, coffee, and rubber plantations, which are largely in the hands of European owners. India's 50 million farm families are concentrated on less than 40 percent of the land area, generally on farms from 3 acres to less than 1 acre in size.

Most of the remaining land is at present unsuitable for agriculture. Throughout India there are large areas of mountains, deserts, forests, and marshes. An estimated 65 million acres of land infested by scrub jungle and kans grass could be brought into cultivation by the use of tractors and land clearing machinery. Large areas of good land are unused because they are located in endemic malarial areas. The Deputy Director of the India Malaria Institute estimates that 40 million acres of idle land in the eastern part of India would be suitable for rice production if malaria could be brought under control. Some of this land, however, may be jungle.

Except along the southwest coast of India and a few other localities, farmers do not live on the land they till but in villages. There are about 700,000 villages in India, ranging in size from 100 to 200 to 10,000 persons. Each village includes a definite amount of surrounding land area owned by individual farmers or landlords. In large parts of the fertile Ganges plain, which holds one-half the Indian population in one-fifth of the country, there are two or three villages to the square mile. Here the average family holding is about 1.5 acres.

The size of an economic unit differs, of course, from region to region according to the nature of the crop raised. The average holding in Bombay Province is 12.2 acres, but the average rice holding in Bombay Province is only 5 acres, while most wheat and grain sorghum holdings consist of 30 acres. Generally, the most economic farm unit is that size of holding which a farmer with one grown son and two oxen can farm.

Fragmentation, too, has an influence on agricultural efficiency and therefore on the economic welfare of the cultivator. Few holdings are a single unit. A cultivator with 5 acres may have five different plots scattered over 2 square miles. Some of the Provinces have passed legislation to correct this waste. Bombay Province, for example, has fixed 5 acres as the minimum size of a plot. This law also provides that when a holder sells his plot of land, he must sell it to one of his neighbors if the plot

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is smaller than the 5-acre fixed minimum and if the neighbor has less than that minimum.

The remedial measures proposed in the different Provinces against the common curse of excessive and successive fragmentation of cultivated land and its dispersal in minute strips are of a varied character. From encouraging and permitting voluntary consolidation by holders in the same village to the compulsory consolidation by legislative authority, there are a variety of schemes, which, however, all seem to founder ultimately on the rock of inheritance. For it has been found that even where compulsory consolidation is legislatively permitted, the maintenance of that consolidation is ordinarily defeated when one of the consolidating members dies and his landed property is distributed among his heirs.

Taxation

Although there has been some disagreement whether land revenue collected by the Government is a tax, its practical result is the same. As a tax, it has proved to be "incorrect in assessment, uncertain in incidence, unequal in distribution of the burden and inelastic in operation."

In the early days of British rule, the excessive dependence on land revenue made it necessary for the state not only to pitch the revenue demand high initially and to raise it from time to time, but also to condone high exactions of the landlord from the tenant. Thus the financial burden of the administration was placed largely on the nonvocal cultivator class. Both in the Permanently-settled and the Temporarily-settled areas the taxation of land has had no scientific basis and its arbitrariness and lack of uniformity have been widely criticized. It provides for neither exemption nor progression. While the incomes of the very poor agriculturists have not been exempted from taxation because of the financial fear of a considerable reduction in total revenue, the incomes of the very rich landlords and intermediaries have been exempted from higher taxation. Also, the land revenue code does not appear to recognize the existence of uneconomic holdings.

The absolute burden of land taxation was reduced during the wartime and postwar period, due to the fact that though these taxes remained the same, prices of agricultural products rose to several times the prewar level. This fact, however, does not alter the unscientific nature of the land revenue tax. A revision of the land tax system appears to be a necessity if the proper incentive to increased agricultural production is to be provided. Such a revision should be made concurrently with contemplated changes in land ownership.

Agricultural Labor

Approximately 30 percent of those actively engaged in agriculture are landless agricultural laborers. Very many others work part time for wages to supplement the income from their small holdings.

Little attention has been given to this large potential of manpower. It habitually lives in a condition verging on starvation. Its own ability to

organize and press for, or even to comprehend, its interest in the distribution of the wealth is next to nil. The burdens of debt to money lenders and of cash payment of revenue appear all but unshakable – unless the organized might of the community comes to the rescue. Laborers generally live in houses provided by a zamindar (landlord) and are as completely at his mercy as are the tenants without a rental agreement. By legislation and by educative effort, they need to be roused to the consciousness of their interest. They need to be strengthened and supported to struggle to improve their standard of living. This support is now coming into evidence through agricultural wage and land reform legislation, supported strongly by Mr. Nehru.

Wages paid agricultural laborers are very low. A survey of 89 farm families conducted in Dorwan village in Bihar in 1950 showed that their average income was only $93.24 a year, of which paid work in the fields yielded $48.93 and the land held by them $24.65. The remainder was earned through miscellaneous labor services. Agricultural work averaged only 151.5 days and other occupations 3.2 days a year. There were few alternative sources of employment.

Against the average income of $93.24 the agricultural workers' families spent on the average $129.36. Only 19 families showed an excess of income over expenditures, and 16 families had an average debt of $42. The small number of days spent on agricultural work indicates that underemployment, as well as low wages, was responsible for the low income level.

Credit, Marketing, and Storage Facilities

The Indian cultivator is essentially a subsistence farmer. Production is largely for family use and seldom is there any possibility of accumulating savings. Borrowing money is a common habit and for various reasons interest rates have been high in India. They have been regulated by law in several Provinces, but, in the absence of credit at legal rates, the cultivator depends largely on the local money lender for loans, generally mortgaging the next crop at rates excessively high. This involves not only onerous indebtedness but frequently the sale of the crop to the money lender at prices previously determined and particularly favorable to the creditor. The absence of a well-established system of grading and processing agricultural produce seriously handicaps trading. The relatively high cost of transport and poor communications contribute to the high cost of marketing. Attempts have been made to provide rural credit and marketing facilities through cooperatives, but these efforts have as yet touched only the fringe of the problem. The "regulated markets" in certain centers are at too great a distance for most cultivators to utilize.

The purpose of these regulated markets is to insure maximum return to the cultivator for his produce by systematizing marketing practices and by promoting the development of cooperative sale organizations to serve as commission agents for cultivators. Such commodities as fibers, cereals, pulses, oilseeds, gur (raw sugar), and condiments have so far comprised most of the trade in regulated markets. However, regulation of the fruit and vegetable trade is being initiated and the bringing of tobacco markets under regulation is being considered. Regulated markets for betel nuts, cardamon, and pepper have been established in some places in Bombay.

It is hoped that regulated markets and cooperative sale organizations will eventually operate licensed warehouses and thus afford economical storage for agricultural produce. Without adequate storage facilities the cultivator has to sell his produce at harvesttime when prices are low and buy his supplies later when prices are higher.

The Government of India is not unaware of the need for a more general availability of credit for the peasant. A bill was passed in the 1950 winter session of the Indian Parliament which, among other things, would extend the provisions of the Reserve Bank of India to all States except Jammu and Kashmir and would extend the period of bank loans for agricultural and cooperative purposes from 9 months to a year, and for certain crops for as long as 15 months. Debate on the bill also provided an opportunity for discussing the establishment of an agricultural finance corporation.

Agricultural Efficiency

The lack of efficiency in production is one of the major causes for the low state of Indian agriculture. In many parts of India the peasants are as hard working as any in the world, but the returns for their labor are insufficient because of antiquated methods and crude implements, inadequate manuring of the land, poor livestock, and insufficient irrigation, to which may be added the low vitality of the farmers themselves, due to the high incidence of malnutrition and disease, and the gradual deterioration of the soil, in the absence of proper erosion control. Farming efficiency is cut, too, by certain traditions. For example, much of India's large cattle population—about one-fourth of the cattle in the world—is unproductive but, because Hinduism professes that cows are sacred and should be allowed to die a natural death, they must be cared for long after they have outlived their usefulness. Too, because of the shortage of wood for cooking, about 40 percent of the available animal manures are used for fuel instead of fertilizer.

Historical Antecedents Affecting Land Tenure

The land tenure system of India has its roots in antiquity. In ancient Hindu law "the field is the property of the man that first brings it under cultivation." For thousands of years, landlords did not exist in India, but, as a rule, cultivators paid a share of the crop or its equivalent to the ruling power as compensation for its protection. The Moslem conquerors of a thousand years ago collected tribute and tax but never claimed proprietorship of peasant lands. The customary rights of the cultivator were safeguarded by the village community. Individual ownership of arable land became fully established, subject to an occasional equalizing redistribution by the village leaders. The village meadows, pastures, and irrigation channels were usually owned in common.

During the declining years of the Moghul Empire era, before British rule, the method of collecting land revenue for the ruling powers had developed in parts of India into a system wherein individuals (zamindars) functioned as revenue collectors possessing landlord rights. The British, on taking over from the Moghuls, cemented these rights into the economic institutions of India by making the rights of zamindars hereditary. The zamindars, as intermediaries between the ruling monarch and the peasant, acquired, in time, some of the ruling prerogatives of the former and a good part of the income of the latter.

Table 1.—*India: Number of landlords, cultivating owners, tenants, and agricultural laborers*[1]

Occupation	Number	Percent of total
Noncultivating proprietors	3,331,169[2]	3.5
Cultivating owners	27,006,100	28.1
Tenant cultivators	34,173,904	35.6
Agricultural laborers	31,480,219	32.8
Total	95,991,392	100.0

[1] Based upon the census of 1931. For all practical purposes the relative proportions and dimensions of the problem remain unchanged.

[2] Includes 63,840 estate agents and managers of owners and 9,938 estate agents and managers of government.

Source: Government of India, National Planning Committee, Report of Sub-Committee on "Land Policy, Agricultural Labour and Insurance." 1948.

At about the beginning of the nineteenth century the British made, in some regions, a permanent settlement of the rates of payment due from the zamindars as land revenue. The zamindars were declared full legal proprietors of the areas over which their revenue collection extended. The annual assessment was fixed for all time at approximately ten-elevenths of what the zamindars were then receiving as rents from the cultivators. The cultivators suffered a double injustice by this settlement: First, by being deprived of their proprietary rights and, second, by being left almost entirely to the mercy of the zamindars who proceeded to exact unreasonably high rents. Later settlements were mostly of a temporary type, subject to revision every 20 or 30 years.

Tenure Systems

Where the pressure of population on the land is excessive, as in India, tenancy becomes a fruitful source of exploitation. There are many systems of land tenure in India but the three main types are zamindari, ryotwari, and mahalwari. The zamindari system is found mainly in Bengal, Bihar, Orissa, northern Madras, and Uttar Pradesh. A variant, known as malguzari, predominates in Madhya Pradesh. Under zamindari the land is owned by a landlord, or zamindar, who pays taxes on it and leases it to tenants for cultivation. Under the ryotwari system, found principally in Madras, Bombay, parts of Central India, and the Punjab, the cultivator is recognized as the owner and pays his taxes direct to the government. Actually many of these ryots have leased their land and become, in effect, zamindars or noncultivating landlords. The distinction between the two types is by now mainly historical. Under both types the practice of subleasing has grown up, particularly in the zamindari areas, where there may be as many as 30 middlemen between the cultivator and the ultimate landlord, each taking a share of the produce.

There has always been a tendency on the part of landlords to usurp power and extend their control over land. The decline of political stability during the disintegration of the Moghul Empire favored this tendency. The British were in process of establishing centralized political control and needed the support of local despots, particularly for revenue collection purposes. The Permanent Settlement of 1793 was, therefore, partly dictated by the political weakness of the British and partly by the absence of a strong native central government. The growth of British strength in India was due in no small part to their effective use of the zamindars. Conversely, the growth of zamindars as a class was due largely to the protection afforded them by British rule.

The zamindari system not only has denied the peasant his right to own land but it also has meant the loss of many other customary rights that had given him valuable communal privileges in regard to matters such as the use of pasture and forest lands, irrigation channels, fisheries, and homestead plots. A very precious old right was that of protection against enhancement of rent. The right to hold land at what is known as pargana rates was a veritable bulwark of the ryot against exploitation. It meant that the zamindar could not take more than what was fixed by the custom and economic circumstances of the village.

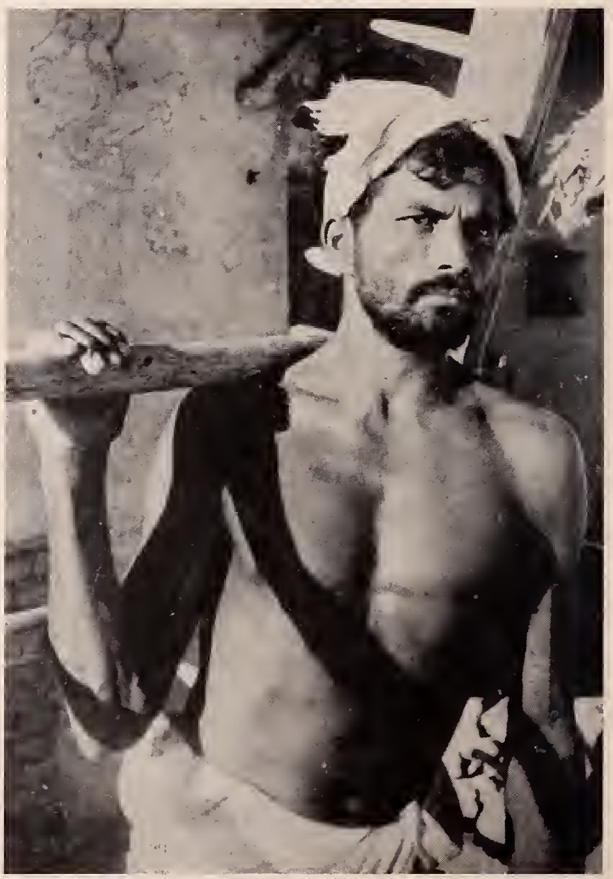
Under the mahalwari system, which prevails in Agra, Oudh, the Punjab, and parts of the Central Provinces, the villages are considered as units in themselves, and the ownership of property is joint or communal. These villages pay land revenue direct to the government. The details regarding procedure, period of settlement, and assessment of land revenue vary from village to village.

Under these three types of land tenure, in course of time, there have evolved various interests in land, widely divergent from Province to Province and complex in economic relationship. The result has been the disintegration of the village economy, control over land by noncultivators, exploitation of the tiller by the rent-receiving interests, and a lack of planned effort to maximize production.

On the average, rents amount to 50 or 60 percent of the gross product, and in some areas the proportion is higher, especially where share cropping prevails. The fractional return received by the tenant-cultivator or laborer is frequently insufficient to maintain minimum standards of nutrition to say nothing of providing an incentive for increasing efficiency of production.

Indian tenants are of various grades. Some, having escaped from the agricultural serfdom of their ancestors, are share croppers. In return for their labor, they may receive between 5 and 10 percent of the total crop—equivalent to a daily wage of 13 to 15 cents for 90 days each year. Other share croppers supply not only labor but also seeds, implements, and bullocks, and in certain areas they receive between one-fourth and one-third of the gross crop yield. Some of these groups belong to communities of untouchables. Higher-caste tenants also are share croppers in regions of unsteady sources of irrigation where crop yields fluctuate with the distribution of rainfall and the availability of water stored in tanks. Many of these cultivators suffer from inequities inherent in the share-cropping system. For example, although this system is prevalent in areas of unsteady yields, it makes no provision for nonpayment or a lower rate of rent or for partial compensation by landowners for tenants' losses in years when the yield is insufficient to meet the expenses of cultivation. The landowner bears no liability for losses incurred in cultivation, but he always takes a share of the produce at harvesttime.

The foregoing indicates that Indian agriculture in general is in a low state of health. This condition, in turn, threatens the political stability of the coun-



Land-owning farmer of southern India. Less than a third of India's farmers own the land they till.

try. Seventy percent of the Indian people are largely poverty-stricken peasants. In the past the peasant has tended passively to accept a meager standard of living as an inevitable condition of life. This is no longer true. The Indian peasant is becoming more aware of the world beyond his own village. He has heard rumors that the Communists have taken over China and that the peasant is better off there. The Communists in India have already had some notable successes in stirring up discontent in local areas. Any prospects of further and continued declines below the present low standards of living will provide the Communist agitator an even more fertile field for exploitation. Political stability cannot long survive in India if the pressure of mass poverty is not relieved.

The Government of India is not unaware of the needs for widespread changes in the economic institutions affecting agriculture. Prime Minister Nehru, in particular, recognizes the necessity of putting the peasant "in the center of the piece" before any basic improvement in the economy can be effected.

Government efforts in the field of agrarian reform date back to 1937 when the introduction of Provincial autonomy resulted in Congress Party governments assuming office in eight Provinces. Subsequently, legislation aimed at protecting the occupancy rights of tenants and limiting rents and interest rates was passed in most of them. Much of the early legislation, however, was only loosely enforced and evasions were common.

All the principal Provinces in India are currently sponsoring legislation that has as the primary object the abolition of the numerous intermediate interests between the state and the cultivator. A large percentage of these intermediaries contribute nothing in the way of increased agricultural production. Instead, they reduce the cultivator's incentive to greater production by depriving him of a just return for his labors. From Uttar Pradesh to Madras and from Bombay to Bengal, Provincial governments are seeking legitimate means for transferring to themselves or to the cultivators the traditional rights of the zamindars. Not the least of the obstacles has been the question of compensation. Practically all Provincial governments are committed to the principal of granting just compensation to dispossessed landlords. So vast, however, are the landholdings of zamindars that it is impossible for the State governments to contemplate outright purchase. The Reserve Bank of India, however, points out that the abolition of zamindari is a special problem in India and justifies the issuance of non-negotiable bonds and non-negotiable annuities as a means of compensation. These bonds and annuities would then be redeemed out of revenues accruing to the State from the cultivators.

In addition to the financial and administrative obstacles to transfer of land rights on a large scale, the Indian program has encountered the organized opposition of powerful landlord groups. In some States the landlords have managed, temporarily at least, to postpone the application of land reform laws. The validity of these laws has been challenged before the courts. Contradictory rulings by the courts in two States have served only to confuse the issue. On June 2, 1951, an amendment to the Constitution validating certain land reform laws was passed by Parliament as a means of preventing litigation holding up implementation of these laws. However, in both Bihar and Uttar Pradesh, zamindars filed petitions in the Supreme Court of India challenging the validity of the amendment to the Constitution on the basis that they questioned the competence of a "Provisional" Parliament to amend the Constitution. They requested, and received, an interim stay of the enforcement of the State acts for abolition of zamindari. This stay was in effect until October 5 when the full bench of the Supreme Court of India ruled unanimously that the amendment was valid and had the full force of law. The significance of the decision cannot be overemphasized. It removes the main obstacle to the implementation of land reform laws on a large scale. By paying proper compensation to landlords, State governments may now confiscate large landholdings and redistribute the land to tenants. One of the most far-reaching land reform programs in world history is in the offing. Within the program lies a real promise of economic improvement for the Indian masses.

Successful realization of this promise, however, depends to a large extent on the individual cultivators. Upon them will rest the responsibilities that are implicit in widened opportunity. These responsibilities require that they be willing to assume a more receptive attitude toward improved farming techniques and to display a larger degree of industry and initiative in their farming activities. Only to the extent that they are willing to do these things will the Indian masses realize their long-run aspirations for a better life.

Cacao in Mexico

The world's demand for chocolate and cocoa, products of the cacao tree, is increasing. But the supply, due to inroads of plant disease, is barely sufficient to meet demands. This article explores Mexico's potential as an important future supplier of cacao beans.

by STANLEY E. BAKEWELL

Mexico holds a unique position in the cacao-producing world. Not only is it considered the original home of cacao but it is free from the diseases that have drastically cut output in principal producing areas. Too, Mexico has extensive lands suitable for cacao development, sufficient labor in the producing areas, a supply of improved planting stock, and one of the highest quality cacaos in the world. This combination may some day make Mexico an important cacao exporter. Over the years the industry lagged because growers preferred to grow bananas; although cacao has been replacing bananas in many areas, its future is still somewhat uncertain because of a lack of capital and credit, complicated land laws, and competition from other food crops.

It was during World War II when shipping difficulty prevented normal marketing of bananas that growers began shifting from bananas to cacao, an old, historically significant crop in Mexico. The Aztecs had used cacao beans as a medium of exchange, made their most popular drink from them, and sometimes demanded them as taxes from conquered tribes. Highly suited to the country, then, cacao production has more than doubled during the past 10 years. Production this year has been estimated at 7,000 metric tons. There were about 70,000 acres in cacao last year; this year the acreage has risen 10 to 20 percent, depending on the locality. Recent high prices have further stimulated production. Last year, cacao prices were considerably higher than in the two previous years, Mexico City wholesale price averaging 5.59 pesos per gross kilogram (29¢ a pound U. S. Cy.), compared with 4.65 pesos (24¢ a pound) for the calendar year 1949. The price this year is still higher—around 6.50 pesos per kilogram (34¢ a pound).

Rapid expansion of cacao production in Mexico depends to a large degree on the amount of capital that can be attracted from outside regions. According to the land laws of Mexico, any individual holding more than 300 hectares (741.3 acres) planted to cacao might be subject to expropriation. And yet for any substantial investment larger holdings would be required. Lack of credit facilities has also tended to retard development. Some credit was advanced in 1949, but additional and wider provisions need to be made for the small growers. Inasmuch as it usually takes from 4 to 5 years for cacao to come into production, growers have no return for several years and must rely on other crops for subsistence and income.

In addition, cacao must meet the competition for land from other crops, mainly bananas, between which there is both a competitive and complementary relationship. In many instances, bananas are planted first to furnish the shade needed for cacao, while at the same time providing some income to the farmer as the cacao comes into production. As more of these tropical lands become tillable, however, it can be expected that corn and other food crops will occupy much of the land in order to increase the chronically short food supply.

Mexico's most important cacao-producing area lies along the Gulf of Mexico, in the States of Tabasco and Chiapas. Here, too, there are more than 240,000 acres of undeveloped rich land highly suited to the crop. Development of the land, however, depends on improved transportation facilities. The only lands cultivated in the past were those along the river, for the roads were only byways, small and impassable during the rainy season and farmers had to depend on air and river transportation. Recently, the Southeastern Railroad has been extended into the area, giving more rapid access to the exterior. Trunk highways and neighborhood roads are still needed and are of primary importance for agricultural expansion.

Mexico now has an estimated total of 15.4 million cacao trees. At least 1.4 million of them are under

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5 years old and have not yet come into bearing; about 1.8 million trees between 6 and 10 years of age have come into bearing since 1946. More than half of the remaining trees are believed to be more than 20 years of age, as no area expansion took place between 1925 and 1941 and new trees were limited to replacements. Cacao stands in Mexico usually last about 35 or 40 years.

Most of Mexico's cacao is produced from the pure Criollo, or native variety; Forastero, a higher-yielding variety introduced 40 years ago; and Ceylan, a hybrid resulting from a Criollo-Forastero cross of various types. The improved planting stock is one of the important factors favoring large-scale cacao expansion in Mexico. Responsible for widespread distribution of this stock to farmers is the Estación Central de Investigación y Propagación de Cacao, where most of the research and improvement work on cacao in Mexico has been done.

Fortunately, Mexican cacao farmers are not bothered with any of the deadly cacao diseases such as witches'-broom, Monilia pod rot, or the virus disease, swollen shoot. Economically harmful sucking insects known in other parts of the world are also absent. Various insects are found on the cacao trees but, in general, they are of a beneficial nature.

Mexican cacao trees are affected, however, with several fungi, which localize in various tissues of the tree from the roots to the fruit and which are often responsible for low yields. Control of such losses is reported to be relatively easy and is done by thinning the shade, draining the more humid plantations, cutting and destroying the diseased pods, and spraying.

Mexico produces one of the finest quality cacaos in the world, mainly because of the high quality of the raw cacao beans but partly because of the care with which they are prepared for market. The old, one-day, one-phase fermentation process is gradually giving way to an improved process in which the beans go through two fermentations over a period of a week.

Commercially classified in foreign markets among those of superior quality, Mexican cacao ranks favorably with Venezuelan, Ecuadoran, and Ceylonese. While the trade in Mexico is not regulated by official grades as in most other countries, two commercial classifications have come into existence. These two grades are determined from outward physical characteristics alone — color, size, shape, and polish.

Until recently, the story of Mexican trade in cacao and cacao products has largely been one of importations. The chief import fraction is that which includes the unprocessed cacao beans. The most significant item of export throughout the past quarter century has been chocolate and other cacao preparations, but, during 1947 and 1948, exports of raw, unprocessed cacao beans became important. In 1947, some 4,935 metric tons of cacao beans were exported, the first sizable exports of cacao from Mexico. Last year 3,423 metric tons were marketed abroad, about the same quantity that will be exported this year.

So, once again, the cacao bean seems to be gaining favor in Mexico. While it probably will never again be accepted in payment of taxes, it may well regain some of its old popularity.

Progressive Mexican planter keeps growth and yield records to help determine best cacao trees.

Tapioca in Thailand

Tapioca is a popular thickening for fruit pies, soups, and puddings. It is made from the roots of the cassava plant—a native of tropical America, which, like the rubbertree, has been transplanted to southeastern Asia, where commercial production centers.

Although output of tapioca in Thailand is small in terms of world trade, its Government is attempting to encourage increased production and to establish methods that will insure a high-quality product.

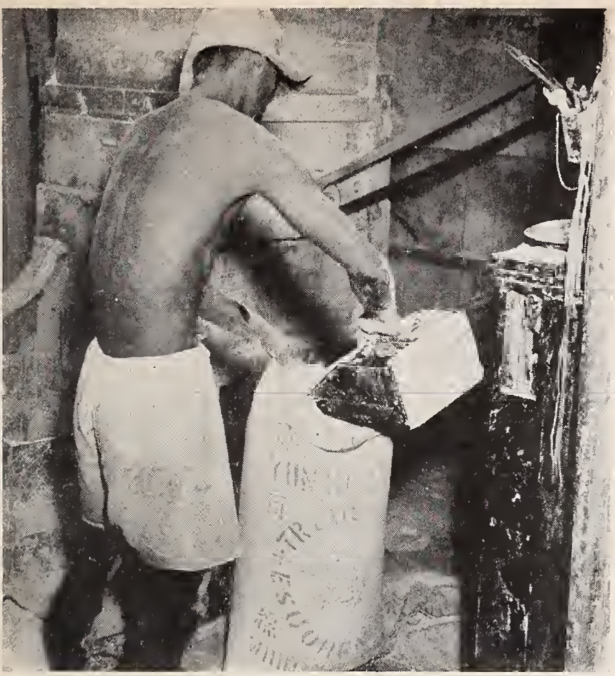
Tapioca processing methods vary from country to country, with some being highly developed. These pictures show the methods commonly used in Thailand.

On delivery to the mill, the roots are sorted, washed, and fed into a grinding machine, through which a stream of water is kept flowing. The ground roots, mixed with water, are passed through a revolving sieve, where the coarse fibers are separated from the finer, starchy material. The starch passes through the meshes of the sieve into a trough that carries it to a screen-covered vat, where the last of the fiber is removed.

After a series of washings, the starch is spread out to dry, either on open-air drying floors or on flue-heated brick platforms. When the starch is dry, it is lumpy and must be ground. The resulting flour is only one form in which tapioca is offered for sale. The other—granular tapioca—is produced by moistening the flour and violently agitating it in a hammocklike device to convert the flour into pellets. To obtain tapioca of uniform size, the pellets are passed through screens. They are then dried in shallow iron pans over charcoal fires.

Cassava roots, from which tapioca is made.

The roots are ground to obtain starch.



Tapioca flour is obtained by grinding dried starch.

Granular tapioca is made by agitating moistened flour.

A charcoal fire dries the damp tapioca pellets.

Agricultural Production In Western Europe*

The postwar recovery of agricultural production in Western Europe has been expressed in production indices and presented most recently in Monograph No. 10, "Agricultural Production and Food Consumption in Western Europe," published in July 1951. The following statistical note gives indices of production on a per capita basis and at the same time brings the earlier index up to date by inclusion of 1950-51 figures. In addition, each country's share in the agricultural production of the area is presented for both prewar and postwar periods.

According to preliminary estimates, gross agricultural production in Western Europe rose strongly in 1950–51, to 10 percent above the prewar level. Net production (production excluding food produced from imported feed) rose to 14 percent above prewar. On a per capita basis, however, gross production was still short of prewar, and net production only slightly higher than in prewar times (table 1).

Nearly all countries contributed to the increase in output in 1950–51, and nearly all produced more than before the war. In most of northwestern Europe, including the United Kingdom, Sweden, Norway, Belgium, and France, gross as well as net production has outstripped the growth in population. Net production per capita has also exceeded prewar in Denmark and the Netherlands.

In central Europe, including Western Germany, Austria, and Switzerland, production has nowhere caught up with the growth in population. The index of production per capita is particularly low in Western Germany, where the population has shown by far the greatest increase because of the huge influx from the east and the incorporation of the Western Sectors of Berlin into the West-German economy.

In the Mediterranean region, prewar per capita production has likewise not yet been reached, except probably in Turkey. Developments there have varied considerably over the past 4 years, as a result of extreme fluctuations in crop output, mainly of wheat. On the whole, however, it seems that Turkey basically has reached a level of production that, on a per capita basis, somewhat exceeds prewar.

Differences in the rate of production increase among the various countries since the war have not, in most cases, been such as to change radically the percentage share of each in the total output of the ERP area in the postwar as compared with the prewar period (table 2).

The contributions of Sweden, the United Kingdom, and Turkey to the area total stand out as larger than before the war; those of Austria and Western Germany, as smaller. Now, as in prewar times, France provides well over 20 percent of the agricultural production of the ERP (European Recovery Program) area, and the three largest producers—France, Western Germany, and Italy—supply fully one-half of the total output.

TABLE 1.—*ERP Countries: Comparison of indices of agricultural production, total and per capita*

Country	Population in thousands	Gross index [1]		Net index [2]	
		Total [3]	On per capita basis	Total [3]	On per capita basis
Austria:					
Prewar	6,760	100	100	100	100
1947–48	7,000	66	64	71	69
1948–49	7,050	72	69	75	72
1949–50	7,100	80	76	83	80
1950–51	7,100	90	86	92	88
Belgium: [4]					
Prewar	8,330	100	100	100	100
1947–48	8,400	83	82	100	99
1948–49	8,600	92	89	110	107
1949–50	8,625	103	99	116	112
1950–51	8,660	110	106	126	121
enelux: [4], [5]					
Prewar	—	100	100	100	100
1947–48	—	78	73	88	82
1948–49	—	91	83	104	95
1949–50	—	106	96	118	106
1950–51	—	112	100	125	112
Denmark:					
Prewar	3,706	100	100	100	100
1947–48	4,170	84	75	93	83
1948–49	4,211	94	83	101	89
1949–50	4,250	108	94	113	98
1950–51	4,290	115	99	123	106
France: [6]					
Prewar	41,200	100	100	100	100
1947–48	40,800	84	85	87	88
1948–49	41,950	100	98	102	100
1949–50	42,300	101	98	103	100
1950–51	42,600	110	106	113	109
Western Germany (excl. Saar):					
Prewar	38,700	100	100	100	100
1947–48	48,100	71	57	75	60
1948–49	49,050	82	65	84	66
1949–50	49,650	93	72	93	72
1950–51	50,200	104	80	106	82
Greece: [7]					
Prewar	6,793	100	100	100	100
1947–48	7,730	85	75	85	75
1948–49	7,810	82	71	82	71
1949–50	7,890	106	91	106	91
1950–51	7,970	94	80	94	80
Ireland:					
Prewar	2,970	100	100	100	100
1947–48	3,000	84	83	86	85
1948–49	3,000	90	89	92	91
1949–50	3,000	98	97	99	98
1950–51	3,000	95	94	95	94

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* Prepared by the European Division, Regional Investigations Branch OFAR.

TABLE 1.—*ERP Countries: Comparison of indices of agricultural production, total and per capita—Con.*

Country	Population in thousands	Gross index[1]		Net index[2]	
		Total[3]	On per capita basis	Total[3]	On per capita basis
Italy:[6]					
Prewar	42,600	100	100	100	100
1947–48	45,540	90	84	90	84
1948–49	45,870	97	90	96	89
1949–50	46,120	104	96	104	96
1950–51	46,400	108	99	108	99
Netherlands:[4]					
Prewar	8,500	100	100	100	100
1947–48	9,600	73	65	82	73
1948–49	9,850	91	78	101	87
1949–50	10,016	108	92	118	100
1950–51	10,150	113	95	124	104
Norway:					
Prewar	2,880	100	100	100	100
1947–48	3,150	94	86	101	92
1948–49	3,200	102	92	107	96
1949–50	3,250	110	97	112	99
1950–51	3,280	118	104	127	112
Continental Portugal:[6]					
Prewar	6,750	100	100	100	100
1947–48	7,760	109	95	109	95
1948–49	7,850	100	86	98	84
1949–50	7,960	103	87	101	86
1950–51	8,070	107	90	106	89
Sweden:					
Prewar	6,249	100	100	100	100
1947–48	6,900	104	94	105	95
1948–49	6,925	113	102	115	104
1949–50	6,986	120	107	123	110
1950–51	7,050	121	107	123	109
Switzerland:					
Prewar	4,170	100	100	100	100
1947–48	4,590	90	82	89	81
1948–49	4,630	99	89	102	92
1949–50	4,660	100	90	102	91
1950–51	4,700	111	98	111	98
Turkey:[8]					
Prewar	16,800	100	100	100	100
1947–48	19,400	96	83	96	83
1948–49	19,625	123	105	123	105
1949–50	19,800	112	95	112	95
1950–51	20,000	120	101	120	101
United Kingdom:					
Prewar	47,200	100	100	100	100
1947–48	49,500	94	90	118	112
1948–49	50,150	108	102	136	128
1949–50	50,400	111	104	136	127
1950–51	50,650	119	111	147	137
ERP area (excl. Turkey):[9]					
Prewar	226,808	100	100	100	100
1947–48	246,240	84	77	89	82
1948–49	250,146	95	86	100	91
1949–50	252,207	103	93	106	95
1950–51	254,120	109	97	114	102
ERP area (incl. Turkey):[10]					
Prewar	243,608	100	100	100	100
1947–48	265,640	85	78	90	82
1948–49	269,771	97	88	101	91
1949–50	272,007	103	92	107	96
1950–51	274,120	110	98	114	101

Office of Foreign Agricultural Relations. Oct. 1951.

[1] No deduction made for the value of imported feed (as part of the feed supply from which domestic livestock was produced).

[2] Excluding the value of imported feed (as part of the feed supply from which domestic livestock was produced).

[3] Latest revision of indices of agricultural production 1950–51 (preliminary) added. Prewar estimates of production of individual agricultural commodities are mostly official estimates and generally refer to the period 1933–34 to 1937–38; in a few cases it seemed necessary to correct for biased reporting. Postwar estimates of production of individual commodities have, in a large number of cases, been revised for underreporting. Estimates of utilization of supplies are those of OFAR. For a complete discussion of the production indices and methodology, see *Foreign Agriculture*, Jan. 1951, or Monograph No. 10, "Agricultural Production and Food Consumption in Western Europe," published in July 1951.

[4] Excluding fruit whose large crop fluctuations make inadvisable inclusion in the index.

[5] Weighted averages for Belgium and the Netherlands.

[6] Including wine.

[7] Including wine and tobacco.

[8] Including tobacco and cotton.

[9] Excluding also Luxembourg and Iceland. The indices include wine for France, Italy, Portugal, and Greece, and tobacco for Greece; they exclude fruit for Belgium and the Netherlands (and Benelux)—see footnote 4.

[10] Excluding Luxembourg and Iceland. The indices include wine for France, Italy, Portugal, and Greece, tobacco for Greece and Turkey, and cotton for Turkey; they exclude fruit for Belgium and the Netherlands (and Benelux)—see footnote 4.

TABLE 2.—*Agricultural production in individual ERP countries as percentage of total in ERP area*[1]

Country	Gross[2]		Net[3]	
	Total	Livestock products only	Total	Livestock products only
	Percent	*Percent*	*Percent*	*Percent*
Austria:				
Prewar	2.8	3.2	2.8	3.3
Postwar	2.2	2.5	2.2	2.6
Belgium:				
Prewar	3.3	4.0	2.8	3.2
Postwar	3.3	3.9	3.1	3.6
Denmark:				
Prewar	4.4	6.3	4.1	6.2
Postwar	4.5	6.1	4.4	6.0
France:[4]				
Prewar	22.3	21.5	23.4	23.1
Postwar	22.0	22.9	22.7	24.0
Western Germany:				
Prewar	16.5	18.9	17.0	20.0
Postwar	14.9	16.2	15.0	16.5
Greece:[5]				
Prewar	2.7	1.2	2.9	1.2
Postwar	2.5	.9	2.5	.9
Ireland:				
Prewar	2.5	3.4	2.5	3.7
Postwar	2.3	3.2	2.3	3.3
Italy:[4]				
Prewar	14.6	9.2	15.8	10.4
Postwar	14.6	9.8	15.2	10.2
Netherlands:				
Prewar	4.8	5.8	4.4	5.2
Postwar	4.8	5.6	4.6	5.3
Norway:				
Prewar	1.1	1.5	1.0	1.4
Postwar	1.2	1.7	1.1	1.5
Continental Portugal:[4]				
Prewar	2.0	1.1	2.2	1.2
Postwar	2.2	1.2	2.2	1.2
Sweden:				
Prewar	3.5	4.2	3.6	4.6
Postwar	4.0	5.1	4.1	5.3
Switzerland:				
Prewar	1.9	2.4	1.9	2.5
Postwar	1.9	2.4	1.8	2.3
Turkey:[6]				
Prewar	6.4	3.7	7.0	4.2
Postwar	7.4	4.3	7.7	4.7
United Kingdom:				
Prewar	11.2	13.6	8.6	9.8
Postwar	12.2	14.2	11.1	12.6
Total:				
Prewar	100.0	100.0	100.0	100.0
Postwar	100.0	100.0	100.0	100.0

Office of Foreign Agricultural Relations, Oct. 1951.

[1] Excluding Luxembourg and Iceland. The percentages have been derived from the data calculated for the construction of the production indices. For a discussion of the indices and methodology, see *Foreign Agriculture*, Jan. 1951, or Monograph No. 10, "Agricultural Production and Food Consumption in Western Europe," published in July 1951.

"Prewar" refers to a 5-year average within the period 1933–38, mostly 1933–34 to 1937–38. "Postwar" refers to the 5-year average 1947–48 through 1951–52. The estimates for 1951–52 included in this average are advance projections as of Sept. 1951.

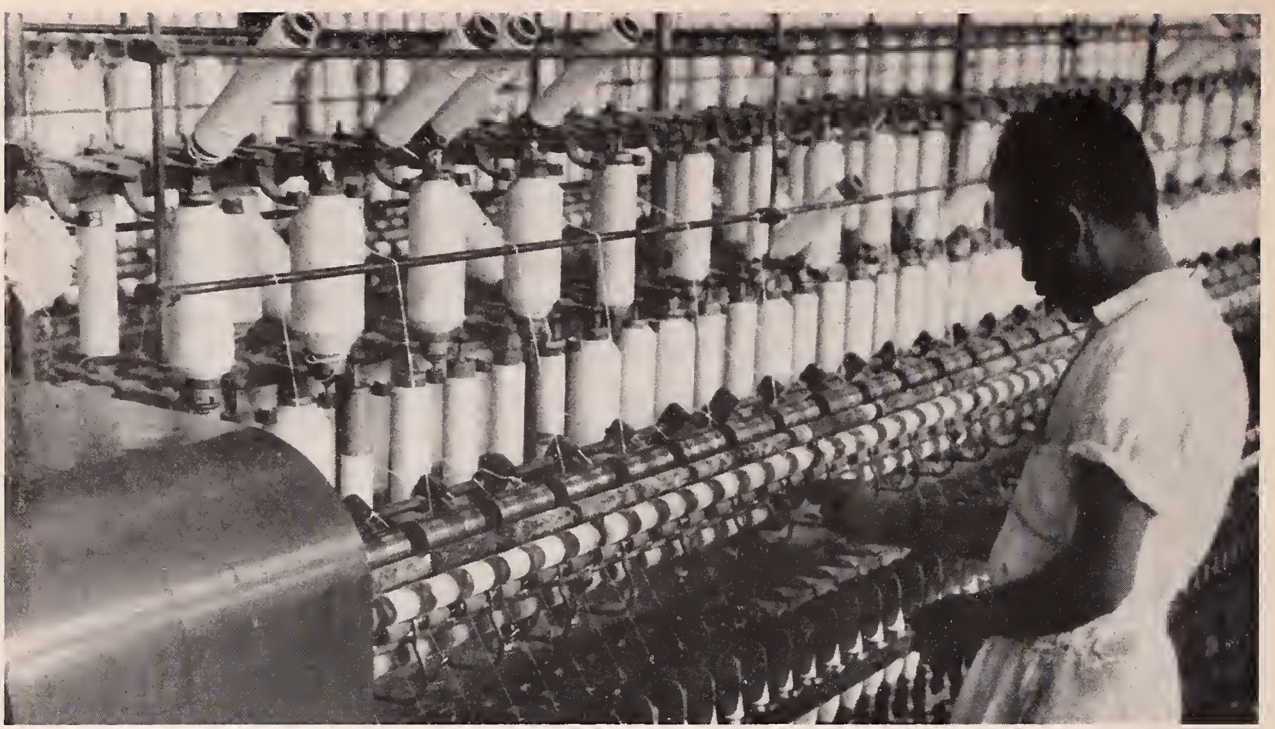
[2] No deduction made for the value of imported feed (as part of the feed supply from which domestic livestock was produced).

[3] Excluding the value of imported feed (as part of the feed supply from which domestic livestock was produced).

[4] Including wine.

[5] Including wine and tobacco.

[6] Including tobacco and cotton.



Pakistan's Cotton Textile Industry

By JOHN E. MANGER

Pakistan expects to be largely self-sufficient in cotton textiles by 1954, if the present program for development of the industry can be completed within that time. Output has increased about 25 percent since the effort began in 1948, and plans to build 35 new cotton mills are under way.

A domestic supply of cotton textiles was not a matter of serious concern to the area that now is Pakistan before its partition from India, in August 1947. Much of its cloth came from India's mills, and it was to those mills that the area sent its cotton. With partition, however, nearly all the cotton mills and two-thirds of the cotton acreage became Indian. Hence, Pakistan began to plan for self-sufficiency in cotton textiles soon after it became an independent nation.

In December 1947 the first Industries Conference was called and it recommended a goal of 1 million spindles by 1954. During 1950 the Textile Advisory Committee, after a survey on all matters relating to the textile and hand-loom industries, recommended—and the Government approved—a 350,000 increase in the spindle goal and the limitation of spindles in Karachi to 400,000 to prevent a concentration of the industry in this area. It was felt that the dispersal of industry would bring a greater share of prosperity and strength to all parts of the country. It was felt, too, that further expansion of spinning facilities should center around the cotton-growing regions in Sind and the Punjab.

The shift of the textile-manufacturing center from East Pakistan to West Pakistan is already apparent. Between 1947 and 1951, the number of spindles in place in West Pakistan increased more than 150 percent; the comparable figure for East Pakistan is 7 percent. Similarly, there are nearly 25 percent more power looms in operation in West Pakistan this year than in 1947, but there was no increase in East Pakistan during the 4 years.

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TABLE 1.—*Number of spindles in place and power looms in East Pakistan and West Pakistan, 1947 and 1951*

Year	Spindles		Power looms	
	East Pakistan	West Pakistan	East Pakistan	West Pakistan
1947	100,000	80,000	2,600	2,200
1951	107,000	208,000	2,600	2,700

The Government has approved the construction of 35 new cotton mills and the purchase of 810,000 additional spindles. Only one of the new mills will be located in East Pakistan, but existing mills there will get 36,000 additional spindles. The rest of the new mills and most of the spindles will be in West Pakistan, 19 of them in Karachi.

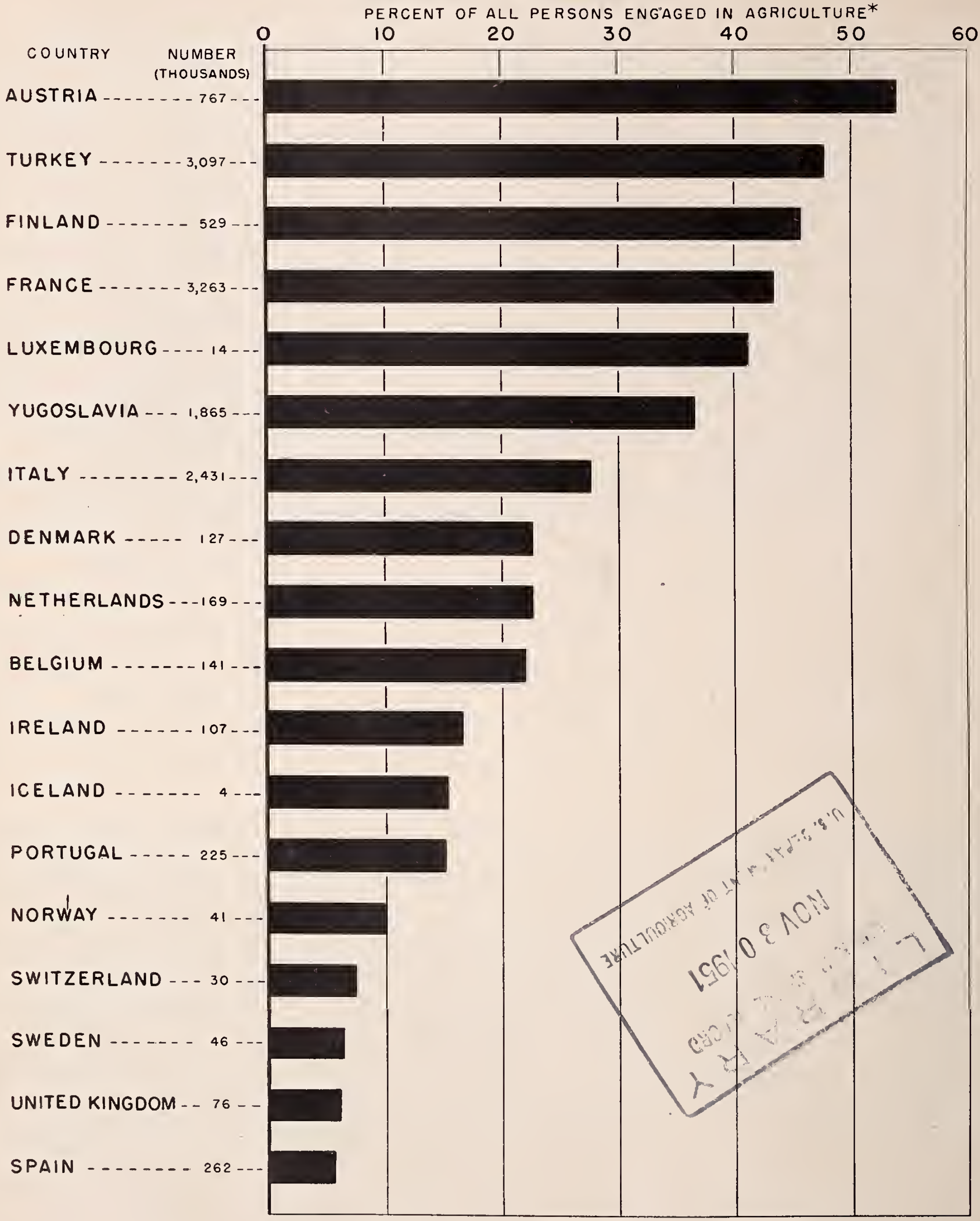
The Government has also approved the purchase of 13,000 additional power looms, all but 500 for installation in West Pakistan. This approval was based in part on the recommendations of the Textile Advisory Committee, which urged the Government to discourage the establishment of large power-loom factories because they offer serious competition to the hand-loom industry, an important phase of Pakistan's economy. There are an estimated 500,000 hand looms in the country, divided evenly between East and West Pakistan. Hand spindles are also common in the country. However, increased production of millspun yarn and improved distribution of this yarn to remote sectors of the country are expected to cut home spinning. Hand weaving, on the other hand, an important part of the economy in the past, is being encouraged, as it is well adapted to those areas where power manufacturing is not practicable and as it furnishes employment for large numbers of people. The Government is assisting the home weaving industry by encouraging large imports of cotton yarn to supply the hand looms. These imports are stimulated by the maintenance of a low import duty on cotton yarn, the liberalization of restrictions and licensing requirements on imports of yarn from soft currency countries and Japan, and provisions in trade agreements, where possible, for increased shipments of yarn to Pakistan.

Pakistan produced 151 million pounds of cotton sales yarn in 1950, 60 percent more than in 1949 and 144 percent more than in 1948. Although less spectacular, production of cotton cloth during 1950 reached 106 million square yards, about 15 percent above the 92 million square yards produced in the preceding year and a 20-percent increase over the 1948 output of 88 million square yards.

Production of raw cotton in Pakistan during the 1950–51 season totaled 1,235,000 bales (500 pounds gross), considerably above the 925,000 bales produced in 1947–48, the first year after partition. If the goal of 1,350,000 spindles is attained and if consumption of cotton in Pakistan—about 140,000 bales in 1950–51—increases proportionately with the additional spindles, consumption might be expected to rise to about 600,000 bales by 1954. In that event, exports of raw cotton, which have ranged between 80 and 90 percent of production during the past four seasons, might be somewhat curtailed.

Farmers of Pakistan unloading freshly picked cotton at a mill.

WOMEN ENGAGED IN AGRICULTURE* IN SPECIFIED COUNTRIES IN EUROPE△



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